

Listing of Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (previously presented) An apparatus for attaching a solid solder element to a solderable substrate, comprising:

an adhesive material applied to a portion of the solid solder element so as to overlap with the solderable substrate outside of a predefined area reserved for subsequent component placement, the adhesive material pre-attaching the solid solder element to the substrate prior to reflow and immobilizing the solid solder element during reflow, the adhesive material not contacting the component prior to and during reflow.

Claims 2-3 (canceled)

4. (previously presented) An interface apparatus for component attachment, comprising:

a solderable substrate;

a solid solder preform; and

an adhesive material for coupling the solid solder preform to the solderable substrate prior to a reflow process, the adhesive material overlapping the solderable substrate and the solid solder preform, the adhesive material cured so as to immobilize the solid solder preform; and

the component subsequently being coupled to the solderable substrate via the solid solder preform during the reflow process, the adhesive material not contacting the component prior to and during the reflow process.

5. (original): The interface apparatus of claim 4, wherein the component is at least one of mechanical, electrical, and electro-mechanical components.

6. (original): The interface apparatus of claim 4, wherein the adhesive material is characterized by a predetermined application viscosity, predetermined volume reduction during the reflow process, retention of adhesive qualities during the reflow process, and an inability to mix with the solid solder element during the reflow process.

7. (previously presented) An interface apparatus for component attachment, comprising:

a solderable substrate;

a solid solder preform; and

an adhesive material having predetermined geometry and adhesive properties cured so as to couple the solid solder preform to the solderable substrate; and

the component subsequently being coupled to the solderable substrate via the solid solder preform during a post cure reflow process during which the adhesive material maintains its geometry and adhesive properties, the adhesive material not contacting the component prior to and during the post cure reflow process.

8. (previously presented) An interface apparatus for component attachment, comprising:

a heat sink;

a solid solder preform;

an adhesive material for pre-attaching the solid solder preform to the heat sink prior to reflow, the adhesive material immobilizing the solid solder preform to the heat sink prior to and during reflow; and

the component being placed onto the immobilized solid solder preform for subjection to the reflow.

9. (previously presented) The interface apparatus of claim 8, wherein the component is at least one of mechanical, electrical, and electro-mechanical components.

10. (previously presented) The interface apparatus of claim 8, wherein the component comprises a high power transistor.

11. (previously presented): The interface apparatus of claim 8, wherein the adhesive material is characterized by a predetermined application viscosity, predetermined volume reduction during the reflow process, retention of adhesive qualities during the reflow process, and an inability to mix with the solid solder element during the reflow process.

12. (previously presented) The interface apparatus of claim 8, wherein the solid solderable preform has a predetermined geometry for placement of the component such that the component does not touch the adhesive material.

13. (withdrawn) A method of applying an interface for component attachment, comprising:

providing a heat sink;

attaching a solder preform to the heat sink with an adhesive material dispensed outside of an area designated for the component;

disposing the component onto the solid solder preform; and

applying a reflow process to the component, the heat sink and the solid solder preform, the solid solder preform being immobilized during the reflow process by the adhesive material outside of the area upon which the component is disposed.